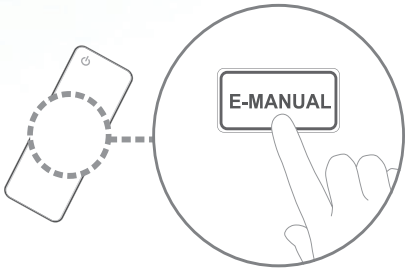
SAMSUNG

E-MANUAL



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Model _____ Serial No. _____

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❑ Using Channel menu

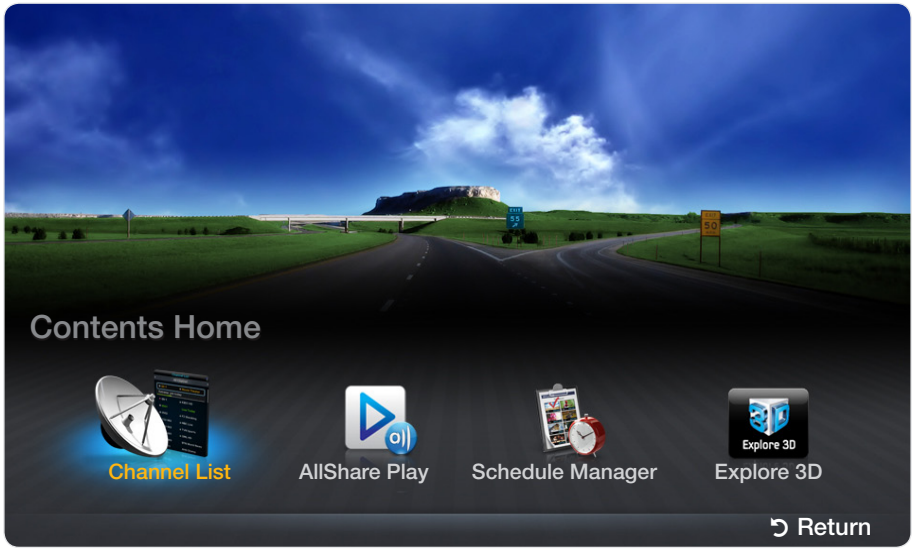
MENU → Support → Contents Home → ENTER

Press the **CONTENT** button to select the desired menu. Each screen will be displayed.

■ Channel List

You can view channel information, **All** and **Favourites 1**-**5**.

When you press the **CH LIST** button on the remote control, **Channel List** screen will be displayed at once.



* The displayed image may differ depending on the model.

- **All**: Shows all currently available channels.
- **Favourites 1-5**: Shows all favourite channels.

  If you want to view favourite channels you added, press the **CH LIST** button and use ◀▶ (**Ch. Mode**) button to move **Favourites 1-5**.

Using the control buttons with the **Channel List**.

- (**Tools**): Displays the option menu.
- ◀▶ (**Ch. Mode**): Move to the **All** and **Favourites 1-5**.

  When you select the **Programme View** in (**Tools**) menu, you can move to other channels using ◀▶ (**Channel**) button.
- (**Watch**): Watches the channel you selected.
- ▲▼ (**Page**): Move to next or previous page.
- (**Return**): Move to the previous step.

Using Option Menu TOOLS

Set each channel using the **Channel List** menu options (**Edit Favourites, Lock/Unlock, Edit Channel Name, Edit Channel Number, Delete, Information, Edit Mode**).

Option menu items may differ depending on the channel status.

1. Select a channel and press the **TOOLS** button.
2. Select a function and change its settings.

- **Edit Favourites**: Set channels you watch frequently as favourites. Add or delete the selected channel in **Favourites 1-5**.

  1. Select the **Edit Favourites**, then press the **ENTER** button.
  2. Press the **ENTER** button to select **Favourites 1-5**, then press the **OK** button.

     One favourite channel can be added in several of favourites among **Favourites 1-5**.

- **Lock/Unlock**: Lock a channel so that the channel cannot be selected and viewed.

  This function is available only when the **Channel Lock** is set to **On**.

  The PIN input screen appears. Enter your 4-digit PIN. Change the PIN using the **Change PIN** option.

- **Edit Channel Name**: Assign your own channel name.
- **Edit Channel Number**: Edit the number by pressing the number buttons desired.

  Some area may not be able to support **Edit Channel Name** and **Edit Channel Number** function.
- **Delete**: You can delete a channel to display the channels you want.
- **Information**: Displays details of the selected programme.
- **Edit Mode**: You can select desired channels and edit it.

Using Option Menu TOOLS

Set each channel using the menu options (**Edit Favourites, Lock/Unlock, Delete, Information, Deselect, Select All**).

1. Press the **TOOLS** button in **Channel List** screen, then select the **Edit Mode**. A check box appears to the left of the channel.
2. Press the ▲/▼ buttons to select the desired channel, then press the **ENTER** button. The (✓) mark indicates the channel you've selected.

   You can select more than one channel.

   Press the **ENTER** again deselects the channel.
3. Press the **TOOLS** button, then select a function and change its settings.

- **Edit Favourites**: Set the selected channels you watch frequently as favourites.

  The **Edit Favourites** screen has five groups (**Favourites 1**, **Favourites 2**, etc.). You can add a favourite channel to any one of the groups. Press the ▲/▼ buttons to select a group.

- **Lock/Unlock**: Lock a channel so that the channel cannot be selected and viewed.

  This function is available only when the **Channel Lock** is set to **On**.

  The PIN input screen appears. Enter your 4-digit PIN. Change the PIN using the **Change PIN** option.

- **Delete**: You can delete a channel to display the channels you want.
- **Information**: Displays details of the selected programme.
- **Deselect**: Deselect the selected channels.
- **Select All**: Select all the channels in the channel list.

Schedule Manager

You can set a desired channel to be displayed automatically at the intended time. In addition, you can view, modify or delete a channel you have reserved to watch. Set the current time first to use this function.

Using Option Menu TOOLS

Set each channel using the menu options (**Cancel schedule, Edit Schedule, Schedule manually**).

1. Press the **TOOLS** button to select the **Schedule manually**.

   You can press the A (**Schedule manually**) directly on the **Schedule Manager** screen.

2. Press the ◄/►/▲/▼ or number buttons to set the **Channel, Repeat, Date, Start Time**.

- **Channel**: Select the desired channel.
- **Repeat**: Select **Once, Manual, Sat~Sun, Mon~Fri** or **Everyday** to set at your convenience. If you select **Manual**, you can set the day you want.

  The (✓) mark indicates the day you've selected.
- **Date**: You can set the desired date.

  It is available when you select **Once** in **Repeat**.
- **Start Time**: You can set the start time you want.

If you want to edit or cancel the schedule, select the reserved schedule on the **Reserved Programmes**. Press the **TOOLS** button, then select the **Edit Schedule** or **Cancel schedule**.

❑ Retuning Channels

■ Area

MENU → Channel → Area → ENTER

You can change the desired area.

Auto Tuning

(depending on the country)

MENU → Channel → Auto Tuning → ENTER

Scans for a channel automatically and stores in the TV.

Automatically allocated programme numbers may not correspond to actual or desired programme numbers. If a channel is locked, the PIN input window appears.

Manual Tuning

MENU → Channel → Manual Tuning → ENTER

Scans for a channel manually and stores in the TV.

If a channel is locked, the PIN input window appears.

According to the channel source, **Manual Tuning** may be supported.

1. Press the **New** button.
2. Set the **Programme, Colour System, Sound System, Channel** and **Search**.
3. Press the **Store** button. When scanning has finished, a channel is updated in the channel list.

Channel mode

– P (programme mode): When tuning is complete, the broadcasting stations in your area have been assigned to the position numbers from P0 to P99. You can select a channel by entering the position number in this mode.
– C (aerial channel mode) / S (cable channel mode): These two modes allow you to select a channel by entering the assigned number for each aerial broadcasting station or cable channel.

Fine Tune

MENU → Channel → Fine Tune → ENTER

If the signal is weak or distorted, fine tune the channel manually.

- Fine tuned channels are marked with an asterisk “*”.
- To reset the fine-tuning, select Reset.

❑ Changing the Preset Picture Mode

MENU → Picture → Picture Mode → ENTER

■ Picture Mode TOOLS

Select your preferred picture type.

When connecting a PC, you can only make changes to the **Entertain** and **Standard**.

- **Dynamic**: Suitable for a bright room.
- **Standard**: Suitable for a normal environment.
- **Natural**: Suitable for reducing eye strain.
- **Movie**: Suitable for watching movies in a dark room.
- **Entertain**: Suitable for watching movies and games.

  It is only available when connecting a PC.

❑ Adjusting Picture Settings

■ Backlight / Contrast / Brightness / Sharpness / Colour / Tint (G/R)

Your television has several setting options for picture quality control.

NOTE

- In analogue **TV, AV** modes of the PAL system, the **Tint (G/R)** function is not available.
- When connecting a PC, you can only make changes to **Backlight, Contrast, Brightness** and **Sharpness**.
- Settings can be adjusted and stored for each external device connected to the TV.
- Lowering picture brightness reduces power consumption.

Screen Adjustment

MENU → Picture → Screen Adjustment → ENTER

Set the various picture options such as picture size and aspect ratio.

- **Picture Size**: Your cable box/satellite receiver may have its own set of screen sizes as well. However, we highly recommend you use 16:9 mode most of the time.

  16:9: Sets the picture to 16:9 wide mode.

  Wide Zoom: Magnifies the picture size more than 4:3.

  Adjusts the **Position** by using ▲, ▼ buttons.

  Zoom: Magnifies the 16:9 wide pictures vertically to fit the screen size.

  Adjusts the **Zoom** or **Position** by using ▲, ▼ button.

4:3: Sets the picture to basic (4:3) mode.

Do not watch in 4:3 format for a long time. Traces of borders displayed on the left, right and centre of the screen may cause image retention (screen burn) which are not covered by the warranty.

- **Screen Fit**: Displays the full image without any cut-off when HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals are inputted.
- **Position**: Adjust the picture position. It is only available in **Screen Fit** or **Wide Zoom**.
- **Zoom/position**: Adjust the picture position. It is only available in **Zoom**.

NOTE

- After selecting **Screen Fit** in HDMI (1080i / 1080p) or Component (1080i / 1080p) mode, you may need to centre the picture:
  1. Press the ▲ or ▼ button to select **Position**.
  2. Press the **ENTER** ↵ button.
  3. Press the ▲, ▼, ◄ or ► button to move the picture.
- Depending on the input source, the picture size options may vary.
- If you want to reset the position you adjusted, select **Reset** in the **Position** screen. The picture will be set to its default position.

- The available items may differ depending on the selected mode.
- When connecting a PC, only **16:9** and **4:3** modes can be adjusted.
- Settings can be adjusted and stored for each external device connected to an input on the TV.
- If you use the **Screen Fit** function with HDMI 720p input, 1 line will be cut at the top, bottom, left and right as in the overscan function.

Input Source	Picture Size
ATV/AV	**16:9, Wide Zoom, Zoom, 4:3**
Component(480i, 480p, 576i, 576p, 720p)	**16:9, Wide Zoom, Zoom, 4:3**
Component(1080i, 1080p)	**16:9, Wide Zoom, Zoom, 4:3, Screen Fit**
HDMI(720p, 1080i, 1080p)	**16:9, Wide Zoom, Zoom, 4:3, Screen Fit**

❑ Changing the Picture Options

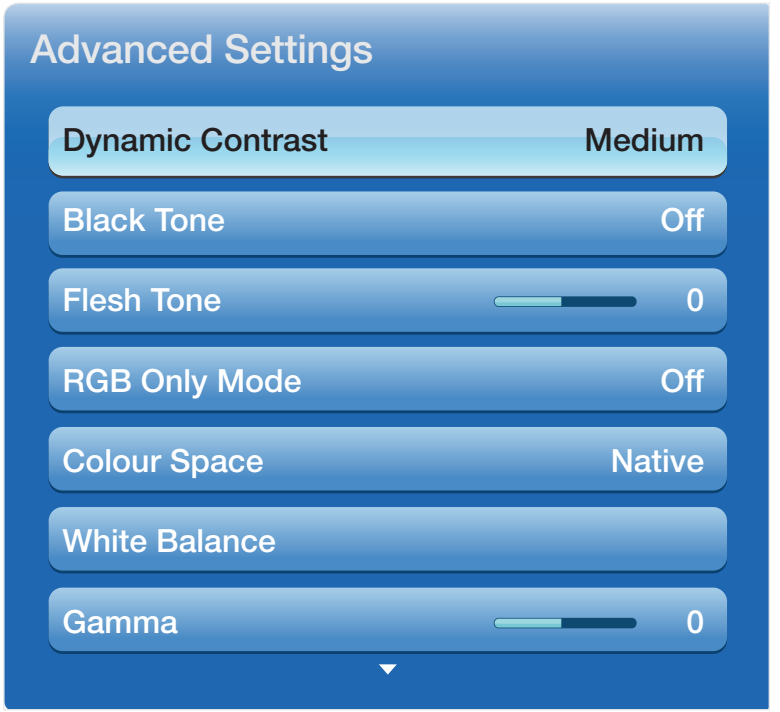
■ Advanced Settings

MENU → Picture → Advanced Settings → ENTER

(available in Standard / Movie mode)

You can adjust the detailed setting for the screen including colour and contrast.

- **Dynamic Contrast (Off / Low / Medium / High)**: Adjust the screen contrast.
- **Black Tone (Off / Dark / Darker / Darkest)**: Select the black level to adjust the screen depth.
- **Flesh Tone**: Adjust the flesh tone colour.



- **RGB Only Mode (Off / Red / Green / Blue)**: Displays the Red, Green and Blue colour for making fine adjustments to the hue and saturation.
- **Colour Space (Auto / Native)**: Adjust the range of colours available to create the image.

- **White Balance**: Adjust the colour temperature for a more natural picture.

  R-Offset / G-Offset / B-Offset: Adjust each colour's (red, green, blue) darkness.

  R-Gain / G-Gain / B-Gain: Adjust each colour's (red, green, blue) brightness.

  Reset: Resets the **White Balance** to its default settings.

- **Gamma**: Adjust the primary colour intensity.
- **Motion Lighting (Off / On)**: Reduce power consumption by brightness control adapted motion.

  This function is not supported in **3D** mode.

  Only available in **Standard** mode.

  When changing a setting value of **Backlight, Brightness** or **Contrast, Motion Lighting** will be set to **Off**.

Picture Options

MENU → Picture → Picture Options → ENTER

When connecting a PC, you can only make changes to the **Colour Tone**.

- **Colour Tone (Cool / Standard / Warm1 / Warm2)**

  Warm1 or **Warm2** will be deactivated when the picture mode is **Dynamic**.

  Settings can be adjusted and stored for each external device connected to an input on the TV.

- **Digital Noise Filter (Off / Low / Medium / High / Auto / Auto Visualisation / Demo)**: If the broadcast signal received by your TV is weak, you can activate the **Digital Noise Filter** feature to reduce any static and ghosting that may appear on the screen.

  When the signal is weak, try other options until the best picture is displayed.

  Auto Visualisation: When changing analogue channels, displays signal strength.

  Only available for analogue channels.

  When the **INFO** button is pressed, the signal strength bar is displayed.

  When bar is green, you are receiving the best possible signal.

- **MPEG Noise Filter (Off / Low / Medium / High / Auto)**: Reduces MPEG noise to provide improved picture quality.
- **HDMI Black Level (Low / Normal)**: Selects the black level on the screen to adjust the screen depth.

  Available only in **HDMI** mode (RGB signals).
- **Film Mode (Off / Auto1 / Auto2)**: Sets the TV to automatically sense and process film signals from all sources and adjust the picture for optimum quality.

  Available in TV mode, AV, COMPONENT (480i / 1080i) and HDMI (1080i).

  If the screen does not seem natural, change its option to **Off / Auto1 / Auto2** in **Film Mode**.

- **Motion Plus (Off / Clear / Standard / Smooth / Custom / Demo):** Removes drag from fast scenes with a lot of movement to provide a clearer picture.

  The Info screen on your TV displays the resolution and frequency of the incoming signal (60Hz), but not the frequency the TV is generating for the image it is displaying by using **Motion Plus** function.

  If noise occurs on the screen, please set up the **Motion Plus** to **Off**. If **Motion Plus** is **Custom**, you can set up the **Blur Reduction, Judder Reduction** or **Reset** manually.

  If **Motion Plus** is **Demo**, you can compare the difference of on and off modes.

Blur Reduction: Adjusts the blur reduction level from video sources.

Judder Reduction: Adjusts the judder reduction level from video sources when playing films.

Reset: Reset the custom settings.

- **LED Motion Plus (Off / On)**: Removes drag from fast scenes with a lot of movement to provide a clear picture.

  It will be deactivated when the picture mode is set to **Natural**.

  The screen may become slightly darker when you play **LED Motion Plus**.

Reset Picture (Yes / No)

MENU → Picture → Reset Picture → ENTER

Resets your current picture mode to its default settings.

❑ Changing the Preset Sound Mode

■ Sound Mode TOOLS

MENU → Sound → Sound Mode → ENTER

- Standard: Selects the normal sound mode.
- Music: Emphasizes music over voices.
- Movie: Provides the best sound for movies.
- Clear Voice: Emphasizes voices over other sounds.
- Amplify: Increase the intensity of high-frequency sound to allow a better listening experience for the hearing impaired.

❑ Adjusting Sound Settings

■ Sound Effect

(standard sound mode only)

MENU → Sound → Sound Effect → ENTER

Use the up and down arrow keys to select an option, and then press ENTER.

- SRS TruSurround HD (Off / On) TOOLS

  (standard sound mode only)

  This function provides a virtual 5.1 channel surround sound experience through a pair of speakers using HRTF (Head Related Transfer Function) technology.

- **SRS TruDialog (Off / On)**

  (standard sound mode only)

  This function allows you to increase the intensity of a voice over background music or sound effects so that dialogue can be heard more clearly.

- **Equaliser**

  Use Equaliser to customize sound setting for each speaker.

  Balance: Adjusts the balance between the right and left speaker.

  100Hz / 300Hz / 1kHz / 3kHz / 10kHz (Bandwidth Adjustment): Adjusts the level of specific bandwidth frequencies.

  Reset: Resets the equaliser to its default settings.

Reset Sound (Yes / No)

MENU → Sound → Reset Sound → ENTER

Reset all sound settings to the factory defaults.

❑ Selecting the Sound Mode TOOLS

When you set to **Dual I-II**, the current sound mode is displayed on the screen.

	Audio Type	Dual I-II	Default
A2 Stereo	Mono	Mono	Automatic change
	Stereo	Stereo ↔ Mono	
	Dual	Dual I ↔ Dual II	Dual I
NICAM Stereo	Mono	Mono	Automatic change
	Stereo	Mono ↔ Stereo	
	Dual	Mono → Dual I ↖ Dual II ↙	Dual I

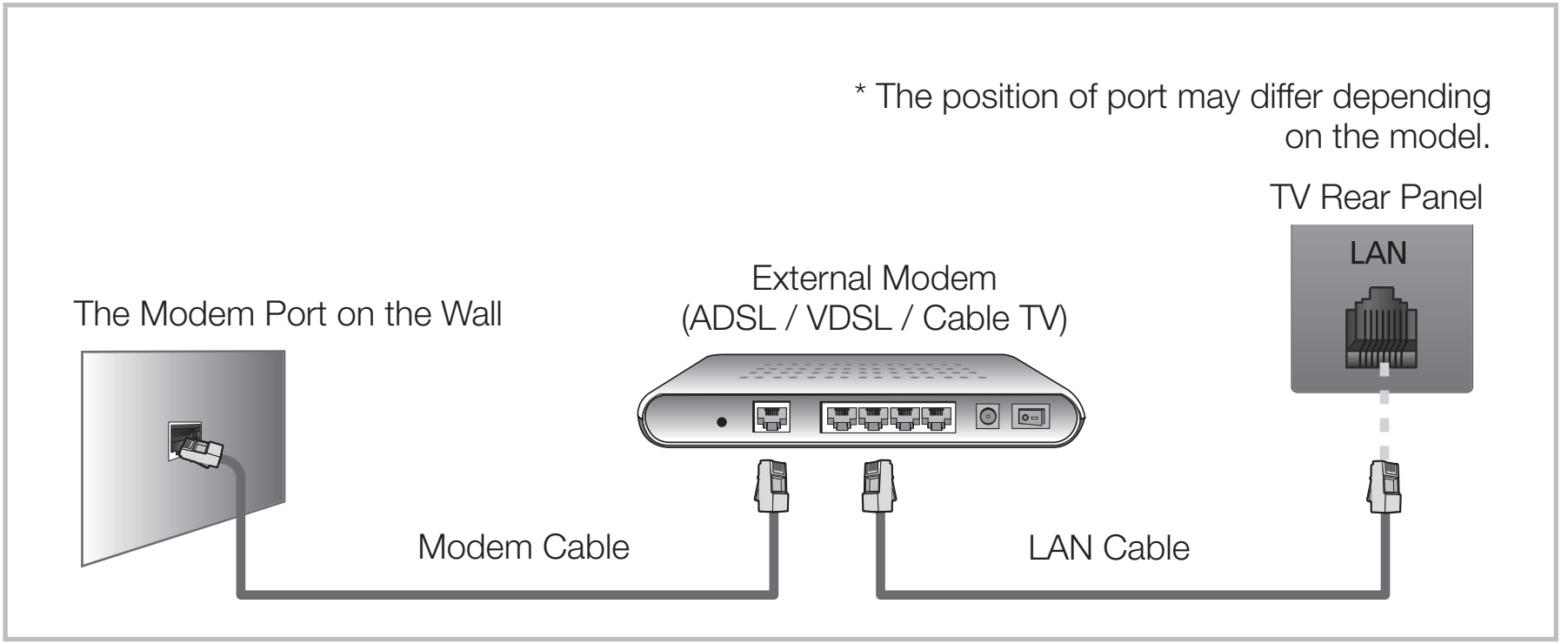
- If the stereo signal is weak and an automatic switching, occurs, then switch to the mono.
- Only activated in stereo sound signal.
- Only available when the **Source** is set to **TV**.

❑ Connecting to the Network

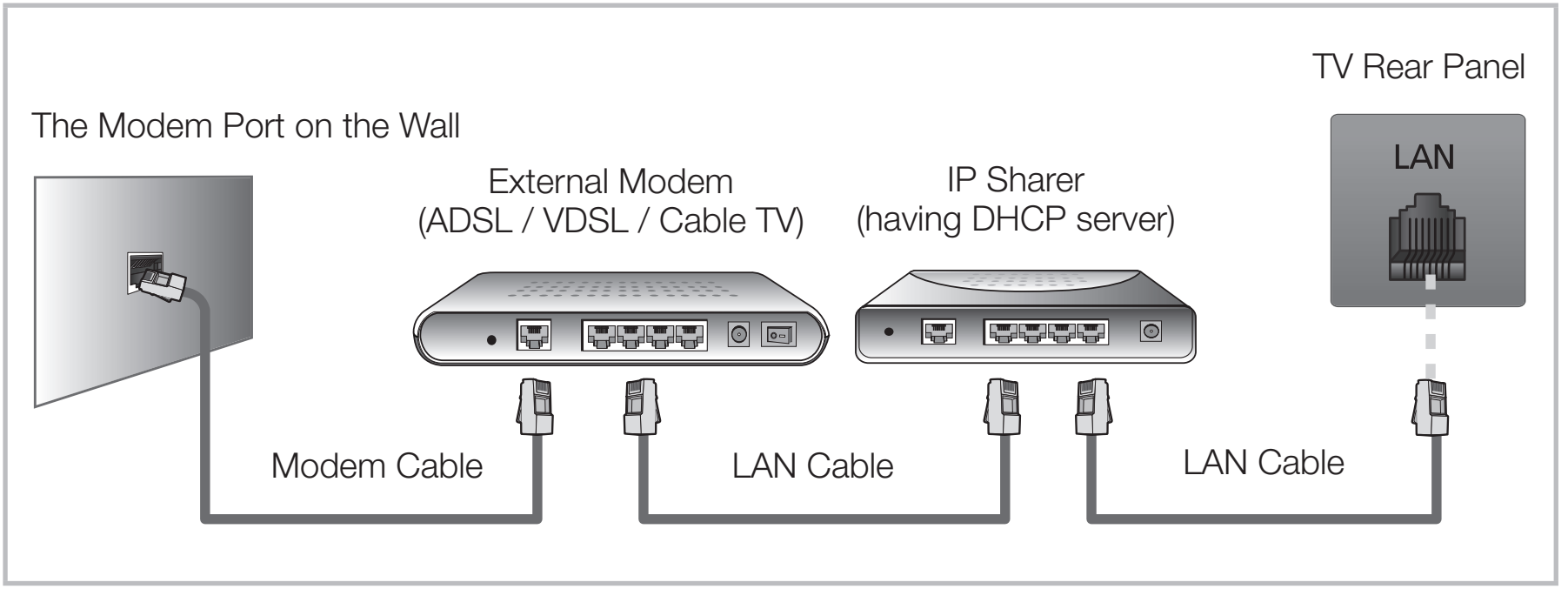
■ Wired Network Connection

You can attach your TV to your LAN using cable in three ways:

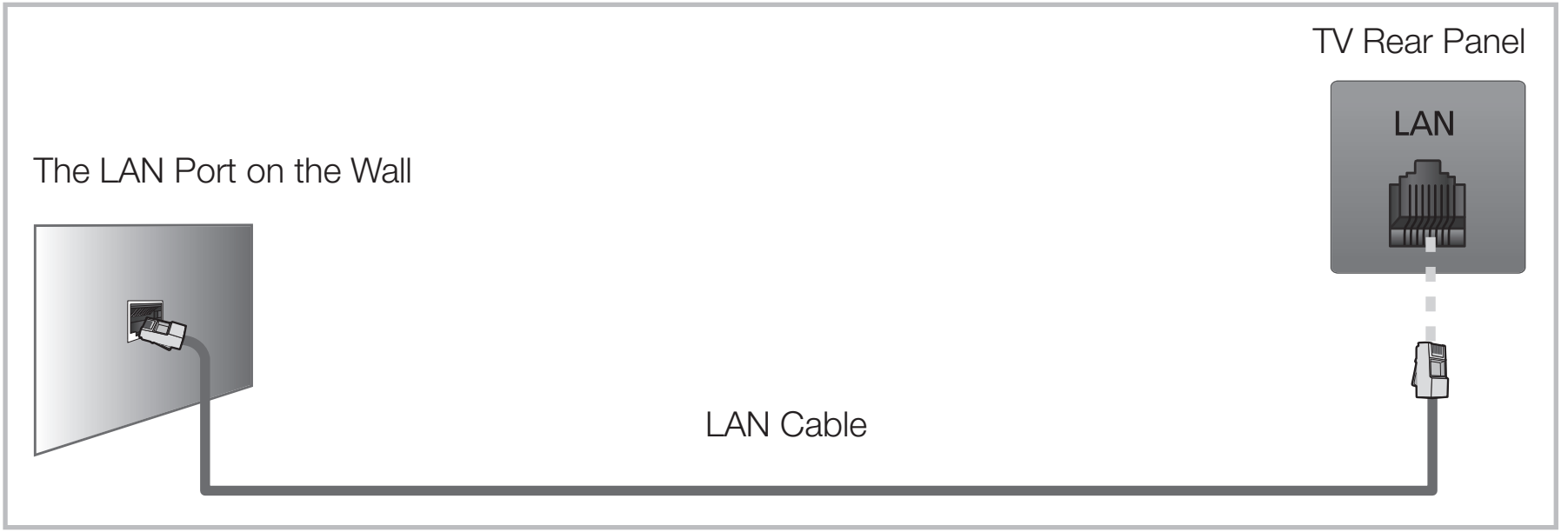
- You can attach your TV to your LAN by connecting the LAN port on the back of your TV to an external modem using a LAN cable. See the diagram below.


* The position of port may differ depending on the model.
TV Rear Panel
LAN
External Modem
(ADSL / VDSL / Cable TV)
The Modem Port on the Wall
Modem Cable
LAN Cable

- You can attach your TV to your LAN by connecting the LAN port on the back of your TV to a IP Sharer which is connected to an external modem. Use LAN cable for the connection. See the diagram below.



- Depending on how your network is configured, you may be able to attach your TV to your LAN by connecting the LAN port on the back of your TV directly to a network wall outlet using a LAN cable. See the diagram below. Note that the wall outlet is attached to a modem or router elsewhere in your house.



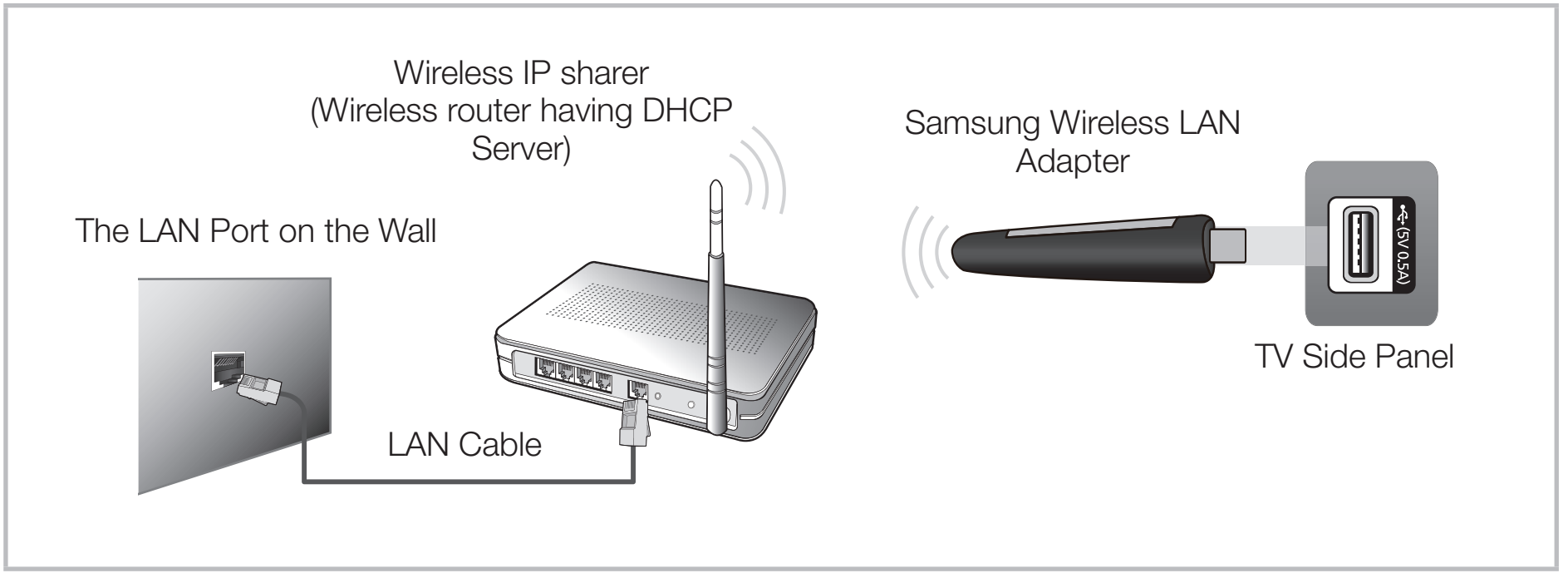
- If your network requires a Dynamic IP address, you should use an ADSL modem or router that supports Dynamic Host Configuration Protocol (DHCP). Modems and routers that support DHCP automatically provide the IP address, subnet mask, gateway, and DNS values your TV needs to access the Internet so you do not have to enter them manually. Most home networks use a Dynamic IP address. Some networks require a Static IP address. If your network requires a Static IP address, you must enter the IP address, subnet mask, gateway, and DNS values manually on your TV's Cable Setup Screen when you set up the network connection. To get the IP address, subnet mask, gateway, and DNS values, contact your Internet Service Provider (ISP). If you have a Windows computer, you can also get these values through your computer.

  You can use ADSL modems that support DHCP if your network requires a Static IP address. ADSL modems that support DHCP also let you use Static IP addresses.

  It is not supported when the network speed is below or equal to 10Mbps.

■ Wireless Network Connection

To connect your TV to your network wireless, you need a wireless router or modem and a Samsung Wireless LAN Adapter (WIS12ABGNX, WIS09ABGNX), which you connect to your TV's back or side panel USB port. See the illustration below.



Samsung's Wireless LAN adapter is sold separately and is offered by select retailers and Ecommerce sites. Samsung's Wireless LAN adapter supports the IEEE 802.11a/b/g and n communication protocols. Samsung recommends using IEEE 802.11n. When you play video over a network connection, the video may not be played smoothly.

NOTE

- You must use the "Samsung Wireless LAN Adapter" (WIS12ABGNX, WIS09ABGNX) to use a wireless network.
- Samsung Wireless LAN Adapter and the USB extension Cable are sold separately and are offered by select retailers and Ecommerce sites.

- To use a wireless network, your TV must be connected to a wireless IP sharer (either a router or a modem). If the wireless IP sharer supports DHCP, your TV can use a DHCP or static IP address to connect to the wireless network.
- Select a channel for the wireless IP sharer that is not currently being used. If the channel set for the wireless IP sharer is currently being used by another device nearby, this will result in interference and communication failure.
- If you apply a security system other than the systems listed below, it will not work with the TV.

- If HIGH PURE THROUGHPUT (Greenfield) 802.11n mode is selected and the Encryption type is set to WEP or TKIP for your wireless router, Samsung TVs will not support a connection in compliance with new Wi-Fi certification specifications.
- If your wireless router supports WPS (Wi-Fi Protected Setup), you can connect to the network via PBC (Push Button Configuration) or PIN (Personal Identification Number). WPS will automatically configure the SSID and WPA key in either mode.

- If your router, modem, or device is not certified, it may not connect to the TV via the “Samsung Wireless LAN Adapter”.
- Ensure the TV is turned off before you connect the Samsung Wireless LAN Adapter.
- Connection Methods: You can setup the wireless network connection like below.
  - Auto Setup (Using the Auto Network Search function)
  - Manual Setup
  - **WPS(PBC)**
- The Samsung Wireless LAN Adapter may not be recognized when using a connection via a USB hub or via a USB extension cable other than the cable supplied.

Notice

The picture may appear corrupted or have static for some channels when the TV is connected to the Samsung Wireless LAN Adapter. In such a case, establish a connection using one of the following methods or connect the Samsung Wireless LAN Adapter using a USB cable in a place that is not affected by radio interference.

Method 1

Connect using the USB right angle adapter. To connect the Samsung Wireless LAN Adapter using the USB right angle adapter, follow these steps:

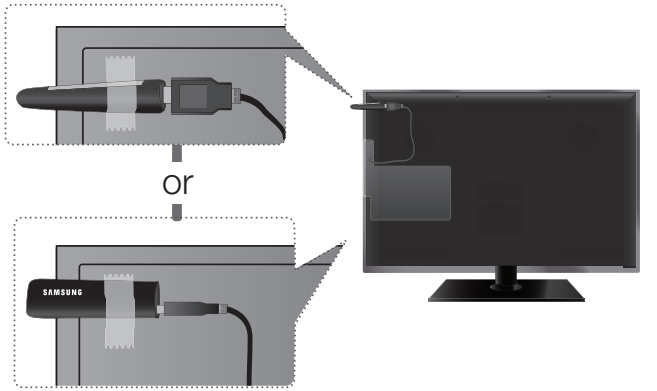
1. Connect the USB right angle adapter to the Samsung Wireless LAN Adapter.
2. Connect the other end of the right angle adapter to the USB port.

* The position of port may differ depending on the model.

Method 2

Connect via an extension cable

To reconnect the Samsung Wireless LAN Adapter using the extension cable, follow these steps:



* The position of port may differ depending on the model.

1. Connect the extension cable to the USB port.
2. Connect the extension cable and Samsung Wireless LAN Adapter.
3. Attach the Samsung Wireless LAN Adapter to the back of the TV near the top, using double-sided adhesive tape.

   The Samsung Wireless LAN Adapter should be installed in an interference-free area in order to avoid interference between the adapter and tuner.

Network Settings

MENU → Network → Network Settings → ENTER

You can set the wired or wireless network connection.

For detailed settings for wired network, refer to the "Setting the Wired Network", and for detailed settings for wireless network, refer to the "Setting the Wireless Network" in this manual.

Network Status

MENU → Network → Network Status → ENTER

You can check the current network and Internet status.

The check list for wired network connection failure

When wired network connection failed, try to apply the following information to each issue.

Issues	Solutions and Explanations
No network cable found.	• Check that your network cable is plugged in. • Samsung Wireless LAN adapter is required to use a wireless network. • If it is connected, make sure that the router is turned on; if it is on, try turning it off and on again.
IP auto setting failed.	Try the following to set your IP address automatically or set your IP address manually by selecting **IP Settings**. • Ensure DHCP server is enabled on router and unplug and re-plug-in the router. • Contact your Internet Service Provider for more information.

Issues	Solutions and Explanations
Unable to connect to the network.	• Check if your IP address is set correctly in **IP Settings**. • Contact your Internet Service Provider for more information.
Connected to your local network, but cannot connect to the Internet.	• Check your Internet LAN cable is connected correctly to LAN port of router. • Check the DNS settings in **IP Settings**. • If the problem persists, contact your Internet Service Provider to access the Internet.
Network setup complete, but cannot connect to the Internet.	• Log in Internet service network. • If the problem persists, contact your Internet Service Provider to access the Internet.

The check list for wireless network connection failure

When wireless network connection failed, try to apply the following information to each issue.

Issues	Solutions and Explanations
Wireless network connection failed.	• No wireless router selected. Go to Network Settings to select your router.
Unable to connect to wireless router.	• Check that the router is turned on, and if it is on, try turning it off and on again. • Check if you need to enter a security key to use the router.
IP auto setting failed.	• Try the following to set your IP address automatically or set your IP address manually by selecting **IP Settings**. • Ensure DHCP server is enabled on router and unplug and re-plug-in the router. • Check if you need to enter a security key to use the router. • Contact your Internet Service Provider for more information.

Issues	Solutions and Explanations
Unable to connect to the network.	• Check if your IP address is set correctly in **IP Settings**. • Check if you need to enter a security key to use the router. • Contact your Internet Service Provider for more information.
Connected to your local network, but cannot connect to the Internet.	• Check your Internet LAN cable is connected correctly to LAN port of router. • Check the DNS settings in **IP Settings**. • If the problem persists, contact your Internet Service Provider to access the Internet.
Network setup complete, but cannot connect to the Internet.	• Log in Internet service network. • If the problem persists, contact your Internet Service Provider to access the Internet.

❑ Setting the Wired Network

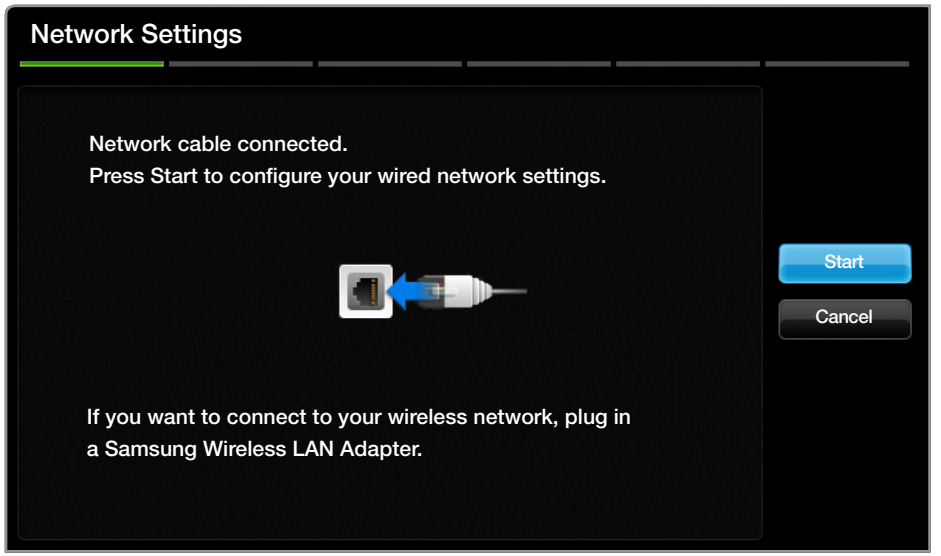
■ Wired Network Setup (Auto)

When connecting the LAN Cable, the screen pop-up appears directly to set wired network.

Use the Automatic Network Setup when connecting your TV to a network that supports DHCP. To set up your TV's cable network connection automatically, follow these steps:

How to set up automatically

1. Go to **Network Settings** screen.
2. Select **Start**.
3. The network connection screen appears, and network setting is done.


Network Settings
Network cable connected.
Press Start to configure your wired network settings.
Start
Cancel
If you want to connect to your wireless network, plug in a Samsung Wireless LAN Adapter.

If it fails to set automatically, check the connection of LAN port.

If you cannot find network connection values or if you want to set connection manually, set it to Manual. Refer to following “How to set up manually”.

■ Wired Network Setup (Manual)

Use the Manual Network Setup when connecting your TV to a network that requires a Static IP address.

Getting the Network Connection Values

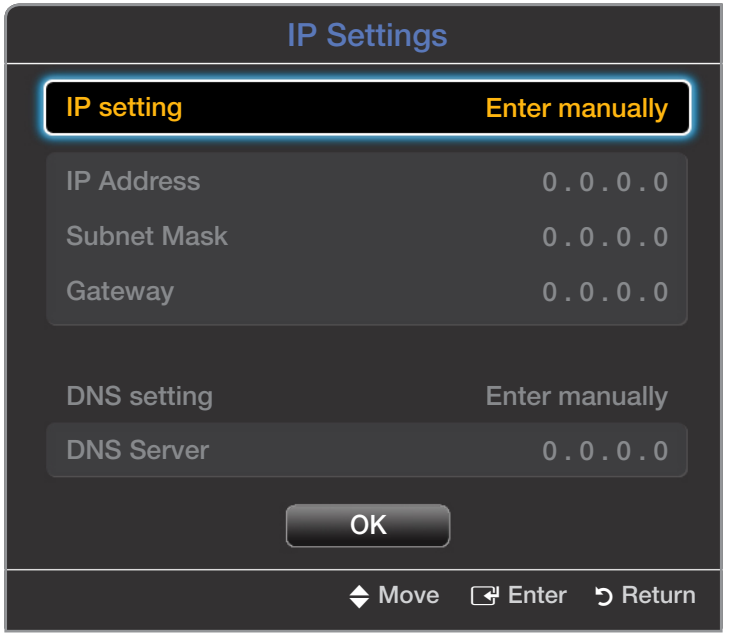
To get the Network connection values on most Windows computers, follow these steps:

1. Right click the Network icon on the bottom right of the screen.
2. In the pop-up menu that appears, click Status.
3. On the dialogue that appears, click the Support tab.
4. On the Support Tab, click the Details button. The Network connection values are displayed.

How to set up manually

To set up your TV's cable network connection manually, follow these steps:

1. Follow Steps 1 through 2 in the "How to set up automatically" procedure.
2. Select the **IP Settings** on network connection screen.
3. Set **IP setting** to **Enter manually**.
4. Press the ▼ button to go to the first entry field.



5. Enter the **IP Address, Subnet Mask, Gateway,** and **DNS Server** values. Use the number buttons to enter numbers and the arrow buttons to move from one entry field to another.
6. When done, select the **OK**.
7. The network connection screen appears, and network setting is done.

❑ Setting the Wireless Network

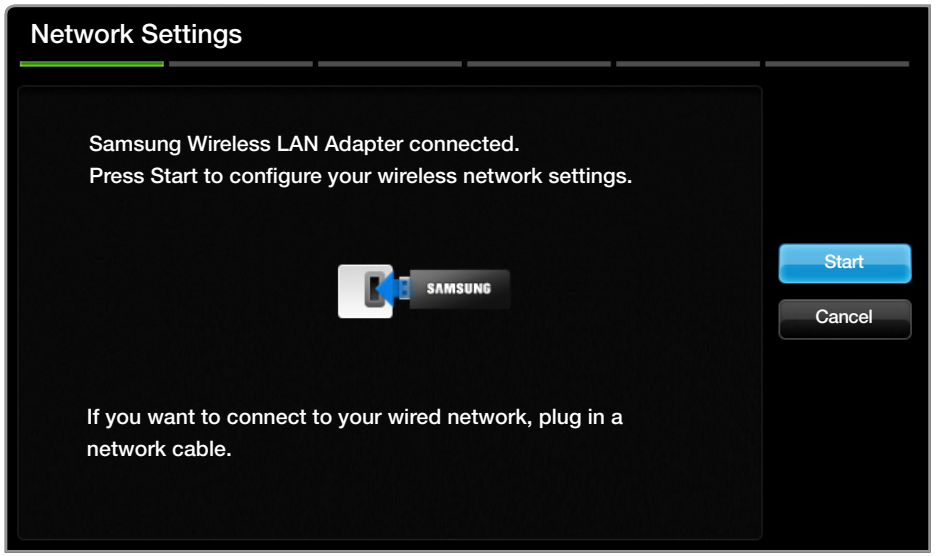
■ Wireless Network Setup (Auto)

Most wireless networks have an optional security system that requires devices that access the network to transmit an encrypted security code called an Access or Security Key. The Security Key is based on a Pass Phrase, typically a word or a series of letters and numbers of a specified length you were asked to enter when you set up wireless security for your wireless network. If you use this method of setting up the network connection, and have a Security Key for your wireless network, you will have to enter the Pass Phrase during the setup process.

When connecting Samsung Wireless LAN Adapter, the screen pop-up appears directly to set wireless network.

How to set up automatically

1. Go to **Network Settings** screen.
2. Select **Start**.
3. The Network function searches for available wireless networks. When done, it displays a list of the available networks.


Network Settings
Samsung Wireless LAN Adapter connected.
Press Start to configure your wireless network settings.
SAMSUNG
Start
Cancel
If you want to connect to your wired network, plug in a network cable.

4. In the list of networks, press the ▲ or ▼ button to select a network, and then press **ENTER** ↵ button.

   If the wireless router is set to Hidden (Invisible), you have to select **Add Network** and enter the correct network name and Security key to establish the connection.

5. If the Security screen pop-up appears, go to step 6. If you select the wireless router which does not have wireless security, go to step 7.

6. To set wireless security for the router, enter the Security key(Security or PIN).

   When you enter the Security key (Security or PIN), use ▲/▼/◄ /► buttons to select number/characters. Press **ENTER** ↵ to enter the characters.

   You should be able to find the Pass Phrase on one of the set up screens you used to set up your router or modem.

7. The network connection screen appears, and network setting is done.

   If it fails to set Security key (Security or PIN), select **Retry** or **IP Settings**.

   If you want to set connection manually, select the **IP Settings**. Refer to following “How to set up manually”.

■ Wireless Network Setup (Manual)

Use the Manual Network Setup when connecting your TV to a network that requires a Static IP address.

Getting the Network Connection Values

To get the Network connection values on most Windows computers, follow these steps:

1. Right click the Network icon on the bottom right of the screen.
2. In the pop-up menu that appears, click Status.
3. On the dialogue that appears, click the Support tab.
4. On the Support Tab, click the Details button. The Network connection values are displayed.

How to set up manually

To set up your TV's cable network connection manually, follow these steps:

1. Follow Steps 1 through 7 in the "How to set up automatically" procedure.
2. Select the **IP Settings** on network connection screen.
3. Set **IP setting** to **Enter manually**.
4. Press the ▼ button to go to the first entry field.
5. Enter the **IP Address, Subnet Mask, Gateway**, and **DNS Server** values. Use the number buttons to enter numbers and the arrow buttons to move from one entry field to another.
6. When done, select the **OK**.
7. The network connection screen appears, and network setting is done.

■ Wireless Network Setup (WPS(PBC))

If your router has a WPS(PBC) button, follow these steps:

1. Go to **Network Settings** screen.
2. Select **Start**.
3. The Network function searches for available wireless networks. When done, it displays a list of the available networks.
4. Select the **WPS(PBC)**.
5. Press the WPS(PBC) button on your router within 2 minutes. Your TV automatically acquires all the network setting values it needs and connects to your network.
6. The network connection screen appears, and network setting is done.

If Your TV Fails to Connect to the Internet

Your TV may not be able to connect to the Internet because your ISP has permanently registered the MAC address (a unique identifying number) of your PC or modem, which it then authenticates each time you connect to the Internet as a way of preventing unauthorized access. As your TV has a different MAC address, your ISP can not authenticate its MAC address, and your TV can not connect.

To resolve this problem, ask your ISP about the procedures required to connect devices other than a PC (such as your TV) to the Internet.

If your Internet service provider requires an ID or password to connect to the Internet, your TV may not be able to connect to the Internet. If this is the case, you must enter your ID or password when connecting to the Internet.

The internet connection may fail because of a firewall problem. If this is the case, contact your Internet service provider.

If you cannot connect to the Internet even after you have followed the procedures of your Internet service provider, please contact Samsung Electronics.

❑ Managing the Network Connected Devices

■ AllShare Settings

MENU → Network → AllShare Settings → ENTER

Set whether to allow a network connected device like a smartphone or tablet to share content or control TV using an application downloaded on your mobile device. For details on set up options, refer to the "Using the DLNA Functions".

Device Name

MENU → Network → Device Name → ENTER

Change the TV's name by keying in a name manually.

A keyboard appears on the screen and you can key in a name for your TV manually using your remote control. For example, if you want to change the name to Samsung TV, press each character using the ▲/▼/◀/► buttons, and then select Done.

❑ Executing initial setup

■ Setup

MENU → System → Setup → ENTER

Configure the channels and the time when setting up the TV for the first time or when resetting the unit.

For the detailed information about setting **Setup**, refer to “Initial Setup” in User Manual.

❑ Setting the Time

■ Time

MENU → System → Time → ENTER

The current time will appear every time you press the **INFO** button.

- **Clock Set**: Set the **Date** and **Time**.

  You can set the **Date** and **Time** directly by pressing the number buttons on the remote control.

❑ Using the Sleep Timer

MENU → System → Time → Sleep Timer → ENTER

- Sleep Timer TOOLS: Automatically shuts off the TV after a preset period of time. (30, 60, 90, 120, 150 and 180 minutes)

  To cancel Sleep Timer, select Off.

❑ Setting the On / Off Timer

MENU → System → Time → On Timer <or> Off Timer → ENTER

- On Timer 1 / On Timer 2 / On Timer 3: Three different on timer settings can be made. You must set the clock first.
  - Setup: Select Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun or Manual to set at your convenience. If you select Manual, you can set up the day you want to activate the timer.

    The ✓ mark indicates the day you've selected.
  - Time: Set the hour and minute.
  - Volume: Set the desired volume level.

– **Source**: To select the source of the content that will play when the TV turns on. You can:

- Select **TV** and have the TV display a specific air or cable channel.
- Select **USB** and have the TV play back photo or audio files from a USB device.
- Select a source on your TV that you have connected a set-top box to, and have the TV display a channel from the set-top box.

The USB device must be connected to your TV before you can select **USB**.

If you select a source other than **TV** or **USB**, you must:

- Have a cable or satellite set-top box attached to that source
- Set the set-top box to the channel you want to watch when the TV goes on
- Leave the set-top box turned on

When you select a source other than **TV** or **USB**, the **Aerial** and **Channel** options will disappear.

– **Aerial** (when the **Source** is set to **TV**): Select **ATV** or **DTV**.

– **Channel** (when the Source is set to **TV**): Select the desired channel.

– **Music / Photo** (when the **Source** is set to **USB**): Select a folder in the USB device containing music or photo files to be played when the TV is turned on automatically.

NOTE

- If there is no music file on the USB device or the folder containing a music file is not selected, the timer function does not operate correctly.
- When there is only one photo file in the USB device, the slide show will not play.
- If a folder name is too long, the folder cannot be selected.

- Each USB you use is assigned its own folder. When using more than one of the same type of USB, make sure the folders assigned to each USB have different names.
- It is recommended that you use a USB memory stick and a multi card reader when using **On Timer**.
- The **On Timer** function may not work with USB devices with a built-in battery, MP3 players, or PMPs made by some manufacturers because these devices take a long time to be recognized.

- **Off Timer 1 / Off Timer 2 / Off Timer 3**: Three different off timer settings can be made. You must set the clock first.

  Setup: Select **Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun** or **Manual** to set at your convenience. If you select **Manual**, you can set up the day you want to activate the timer.

  The ✓ mark indicates the day you've selected.

  Time: Set the hour and minute.

❑ Locking Programme

■ Security

MENU → System → Security → ENTER

The PIN input screen appears before the setup screen.

Enter your 4-digit PIN. Change the PIN using the **Change PIN** option.

- **Channel Lock (Off / On)**: Lock channels in Channel menu to prevent unauthorized users, such as children, from watching unsuitable programme.
  - Available only when the **Source** is set to **TV**.
- **Change PIN**: Change your password required to set up the TV.

❑ Economical Solutions

■ Eco Solution

MENU → System → Eco Solution → ENTER

- Energy Saving (Off / Low / Medium / High / Picture Off) TOOLS: This adjusts the brightness of the TV in order to reduce power consumption. If you select Picture Off, the screen is turned off, but the sound remains on. Press any button except volume button to turn on the screen.

- **Eco Sensor (Off / On)**: To enhance your power savings; the picture settings will automatically adapt to the light in the room.

  If you adjust the **Backlight**, the **Eco Sensor** will be set to **Off**.

  Min Backlight: When **Eco Sensor** is **On**, the minimum screen brightness can be adjusted manually.

  If **Eco Sensor** is **On**, the display brightness may change (become slightly darker or brighter) depending on the surrounding light intensity.

- **No-Signal Power Off (Off / 15 min / 30 min / 60 min)**: To avoid unnecessary energy consumption, set how long you want the TV to remain on if it's not receiving a signal.

  Disabled when the PC is in power saving mode.

- **Auto Power Off (Off / On)**: The TV will be automatically turned off when no user operation is received for 4 hours.

❑ Other Features

■ Menu Language

MENU → System → Menu Language → ENTER

Set the menu language.

1. Select Menu Language and press the ENTER button.
2. Choose desired language and press the ENTER button.

General

MENU → System → General → ENTER

- Game Mode (Off / On): When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting game mode.

  NOTE

  - Precautions and limitations for game mode
    - To disconnect the game console and connect another external device, set Game Mode to Off in the setup menu.
    - If you display the TV menu in Game Mode, the screen shakes slightly.

- **Game Mode** is not available in **TV** mode.
- After connecting the game console, set **Game Mode** to **On**. Unfortunately, you may notice reduced picture quality.
- If **Game Mode** is **On**:
  - **Picture Mode** is set to **Standard** and **Sound Mode** is set to **Movie**.

- **Panel Lock (Off / On)**: Lock or unlock all the keys on the TV.
- **Boot Logo (Off / On)**: Display Samsung logo when the TV is turned on.

DivX® Video On Demand

MENU → System → DivX® Video On Demand → ENTER

Shows the registration code authorized for the TV. If you connect to the DivX web site and register with 10-digit registration code, you can download the VOD activation file.

Once you play it using **Videos**, the registration is completed.

For more information on DivX® VOD, visit http://vod.divx.com.

❑ Support Menu

■ e-Manual

MENU → Support → e-Manual → ENTER

You can read the introduction and instructions about the TV features stored in your TV.

For the detailed information about e-Manual Screen, refer to “How to use the e-Manual” in User Manual.

Self Diagnosis

MENU → Support → Self Diagnosis → ENTER

Self Diagnosis might take few seconds, this is part of the normal operation of the TV.

- Picture Test (Yes / No): Use to check for picture problems.
- Sound Test (Yes / No): Use the built-in melody sound to check for sound problems.

- **Reset**: Reset all settings to the factory defaults except network settings.
  - The PIN input screen appears before the setup screen.
  - Enter your 4-digit PIN. Change the PIN using the **Change PIN** option.
- **Troubleshooting**: If the TV seems to have a problem, refer to this description.
  - If none of these troubleshooting tips apply, contact the Samsung customer service centre.

Software Update

MENU → Support → Software Update → ENTER

Software Update can be performed by downloading the latest firmware from “www.samsung.com” to a USB memory device.

Current Version-the software already installed in the TV.

Installing the Latest Version

- By USB: Insert a USB drive containing the firmware upgrade file, downloaded from “www.samsung.com” into the TV. Please be careful not to disconnect the power or remove the USB drive until upgrades are complete. The TV will be turned off and on automatically after completing the firmware upgrade. When software is upgraded, video and audio settings you have made will return to their default settings. We advise you to write down your settings so that you can easily reset them after the upgrade.

- **Online**: Upgrade the software using the Internet.

  First, configure your network. For detailed procedures on using the Network Setup, refer to the “**Network Settings**” instructions.

  If the internet connection doesn’t operate properly, the connection may be broken. Please retry downloading. If the problem persists, download by USB and upgrade.

- **Alternative Software**: Replace the current software with the alternative.
- **Standby Mode Upgrade (Off / On)**: A manual upgrade will be automatically performed at selected time. Since the power of the unit is turned on internally, the screen may be turned on slightly for the product. This phenomenon may continue for more than 1 hour until the software upgrade is complete.

Contact Samsung

MENU → Support → Contact Samsung → ENTER

View this information when your TV does not work properly or when you want to upgrade the software. You can find information regarding our call centres, and how to download products and software.

Contents Home

MENU → Support → Contents Home → ENTER

You can enjoy useful and various contents.

❑ Using the 3D function

■ 3D

MENU → Picture → 3D → ENTER

This exciting new feature enables you to view 3D content. To fully enjoy this feature, you must purchase a pair of Samsung 3D Active Glasses to view 3D video. Samsung 3D Active Glasses are sold separately. For more detailed purchasing information, contact the retailer where you purchased this TV.

"Full HD 3D Glasses™" Logo indicates compatibility between display products and 3D Glasses which are compliant with the "Full HD 3D Glasses™" format, and does not indicate picture quality of display products.

Viewing TV using the 3D function

IMPORTANT HEALTH AND SAFETY INFORMATION FOR 3D PICTURES.

Read and understand the following safety information before using the TV's 3D function.

⚠ WARNING

- Some viewers may experience discomfort while viewing 3D TV such as dizziness, nausea and headaches. If you experience any such symptom, stop viewing 3D TV, remove 3D Active Glasses and rest.
- Watching 3D images for an extended period of time may cause eye strain. If you feel eye strain, stop viewing 3D TV, remove your 3D Active Glasses and rest.

- A responsible adult should frequently check on children who are using the 3D function. If there are any reports of tired eyes, headaches, dizziness, or nausea, have the child stop viewing 3D TV and rest.
- Do not use the 3D Active Glasses for other purposes (such as general eyeglasses, sunglasses, protective goggles, etc.)
- Do not use the 3D function or 3D Active Glasses while walking or moving around. Using the 3D function or 3D Active Glasses while moving around may result in injuries due to running into objects, tripping, and/or falling.

- **3D Mode**: Select the 3D input format.

  If you want to feel the 3D effect fully, please wear the 3D Active Glasses first, and then select 3D Mode from the list below that provides the best 3D viewing experience.

  When watching 3D images, turn on 3D Active Glasses.

3D Mode		Operation
	Off	Turns the 3D function off.
	2D → 3D	Changes a 2D image to 3D.
	Side by Side	Displays two images next to each other.
	Top & Bottom	Displays one image above another.

Some file format may not be supported the "2D → 3D".

When you watch 3D images under flickering lighting such as a fluorescent lamp (50Hz ~ 60Hz) or a 3 wavelength lamp, you may notice some screen flickering. If this occurs, dim or turn off the light.

- **3D Perspective (-5 ~ +5)**: Adjust overall 3D perspective of on-screen image.
- **Depth (1~10)**: Adjust overall depth.
- **L/R Change (L/R Image / R/L Image)**: Swap the left and right pictures.
- **3D → 2D (Off / On)**: Displays the image for the left eye only.

  This function is deactivated when 3D Mode set to "

" or "Off".
- **3D Optimisation (-1 ~ +1)**: Automatically adjusts the picture overall to provide an optimal 3D effect.

Support resolution (16:9 only)

- HDMI

Source	Resolution	Frequency (Hz)
	1280 X 720p	50 / 59.94 / 60 Hz
	1920 X 1080i	50 / 59.94 / 60 Hz
	1920 X 1080p	23.98 / 24 / 25 / 29.97 / 30 / 50 / 59.94 / 60 Hz
Frame Packing	1280 X 720p	50 / 59.94 / 60 Hz
	1920 X 1080i	50 / 59.94 / 60 Hz
	1920 X 1080p	23.98 / 24 / 25 / 29.97 / 30 Hz

- Component & DTV

Source	Resolution	Frequency (Hz)
Component	1280 X 720p	50 / 59.94 / 60 Hz
	1920 X 1080i	50 / 59.94 / 60 Hz
	1920 X 1080p	23.98 / 24 / 25 / 29.97 / 30 / 50 / 59.94 / 60 Hz
DTV	1280 X 720p	50 / 59.94 / 60 Hz
	1920 X 1080i	50 / 59.94 / 60 Hz
	1920 X 1080p	25 Hz

- **Videos / Photos** (In **AllShare Play**)

  Refer to "Supported Subtitle and AllShare Play file formats" in the Other Information section.

How to watch the 3D image

- Method 1

  Some 3D modes may not be available depending on the format of the image source.

  To watch in 3D, wear 3D Active Glasses and press the power button on the glasses.

  1. Press the **MENU** button use the ▲ or ▼ button to select **Picture**, and then press the **ENTER** ↵ button.
  2. Use the ▲ or ▼ button to select **3D**, and then press the **ENTER** ↵ button.
  3. Use the ▲ or ▼ button to select **3D Mode**, and then press the **ENTER** ↵ button.
  4. Using the ◄ or ► buttons select the **3D Mode** of the image you want to view.

- Method 2

  1. Press the 3D button, and then you can view the **3D** image.
  2. If you want to change 3D options (such as **3D Perspective**), press the **MENU** button and then select **Picture**.
  3. Go to Step 3 in the “Method 1”, and follow the directions from that point on.

     To exit the **3D** mode, press the 3D button again.

Before using 3D function...

NOTE

- **3D Mode** is set to **Off** automatically when you access **AllShare Play** or **e-Manual** functions.
- **3D Mode** is set to memorised configuration value automatically, when changing the input source.
- Some **Picture** functions are disabled in **3D** mode.
- 3D Active Glasses from Samsung's previous product (IR type) or other manufacturers not be supported.
- When the TV is initially powered on, may take some time until the 3D display is optimized.

- The 3D Active Glasses may not work properly if there is any other 3D product or electronic devices turned on near the glasses or TV. If there is a problem, keep other electronic devices as far away as possible from the 3D Active Glasses.
- Be sure to stay within the viewing angle and optimum TV viewing distance when watching 3D pictures. Otherwise, you may not be able to enjoy proper 3D effects.
- The ideal viewing distance should be three times or more the height of the screen. We recommend sitting with viewer's eyes on a level with the screen.

❑ Using the Explore 3D

MENU → Support → Contents Home → ENTER

Press the **CONTENT** button to select **Explore 3D**. You can enjoy the diverse 3D contents through **Explore 3D**.

First, configure your network. For detailed procedures on using the Network Setup, refer to the “**Network Settings**” instructions.

Explore 3D may not be available in all regions.

❑ Using the Media Contents

Enjoy photos, music and movie files saved on a USB Mass Storage Class (MSC) device.

1. Press the **CONTENT** button to select **AllShare Play**.
2. Press ▲/▼ button to select desired menu (**Videos**, **Photos**, **Music**), then press the **ENTER** ↵ button.
3. Press ▲/▼ button to select desired device, then press the **ENTER** ↵ button again.

❑ Connecting a USB Device

1. Turn on your TV.
2. Connect a USB device containing photo, music and movie files to the USB port on the side of the TV.
3. When USB is connected to the TV, popup window appears. You can select the **Videos, Photos** or **Music** directly.

It might not work properly with unlicenced multimedia files.

Need-to-Know List before using Media Contents

- MTP (Media Transfer Protocol) is not supported.
- The file system supports NTFS (Read Only), FAT16 and FAT32.
- Certain types of USB Digital camera and audio devices may not be compatible with this TV.

- Media Contents only supports USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives, Flash Card Readers (USB HUB are not supported). Devices should be connected directly to the TV's USB port.
- Before connecting your device to the TV, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.
- The HDD (Hard Disk Drive) connected to USB is supported.
- Do not disconnect the USB device while it is loading.
- The higher the resolution of the image, the longer it takes to display on the screen.
- The maximum supported JPEG resolution is 15360 x 8640 pixels.

- For unsupported or corrupted files, the “Not Supported File Format” message is displayed.
- MP3 files with DRM that have been downloaded from a non-free site cannot be played. Digital Rights Management (DRM) is a technology that supports the creation, distribution and management of the content in an integrated and comprehensive way, including the protection of the rights and interests of the content providers, the prevention of the illegal copying of contents, as well as managing billings and settlements.
- A USB device that requires high power (more than 1A) may not be supported.
- If the TV has been no input during time set in **Auto Protection Time**, the Screensaver will run.
- The power-saving mode of some external hard disk drives may be released automatically when connected to the TV.

- If a USB extension cable is used, the USB device may not be recognized or the files on the device may not be read.
- If a USB device connected to the TV is not recognized, the list of files on the device is corrupted or a file in the list is not played, connect the USB device to the PC, format the device and check the connection.
- If a file deleted from the PC is still found when Media Contents is run, use the “Empty the Recycle Bin” function on the PC to permanently delete the file.
- **AllShare Play** only supports sequential jpeg format.
- The scene search and thumbnail functions are not supported in the **Videos**.
- If the number of files and folders saved on a USB storage device is approximately over 4000, the files and folders may not appear and some folders may not be opened.

Disconnecting a USB Device

- Method 1: Using the **SOURCE** button.

  1. Press the **SOURCE** button.
  2. Select a desired USB device, and then press the **TOOLS** button. The **Tools** menu appears.
  3. Select **Safely Remove USB Device**, and then wait until the selected USB device is disconnected. You can remove a USB device from the TV.

- Method 2: Using the **AllShare Play** home Screen.

  1. Go to **AllShare Play** home Screen.
  2. Select any category, and then press the **ENTER** button.
  3. Select a desired USB device, and then press the **TOOLS** button. The **Tools** menu appears.
  4. Select **Safely Remove USB Device**, and then wait until selected USB device is disconnected. You can remove a USB device from the TV.

NOTE To remove a USB device from the TV, we recommend use **Safely Remove USB Device** function.

❑ Connecting to the PC through network

You can play pictures, music and videos saved on your PC through a network connection in the **AllShare Play** mode over your TV.

- Web storage and out of home network connectivity are not available.
- If you want to use **AllShare Play** to play files saved on your PC over your TV, you should download “AllShare PC Software” and users manual from “www.samsung.com”.

1. For more information on how to configure your network, refer to ‘Network Connection’.
   – You are recommended to locate both TV and PC in same subnet. The first 3 parts of the IP address of the TV and PC should be the same and only the last part (the host address) should be changed. (e.g. IP Address: 123.456.789.**)

2. Using a LAN cable, connect between the external modem and the PC onto which the AllShare PC Software programme will be installed.
   – You can connect the TV to the PC directly without connecting it through a Sharer (Router).

Functions that are not supported when connecting to a PC through a network:

- The **Background Music On** and **Background Music Setting** functions.
- The ◀◀ (REW) or ▶▶ (FF) button while a movie is playing.

The DivX DRM, Multi-audio, embedded caption does not supported.

AllShare PC Software should be permitted by the firewall programme on your PC.

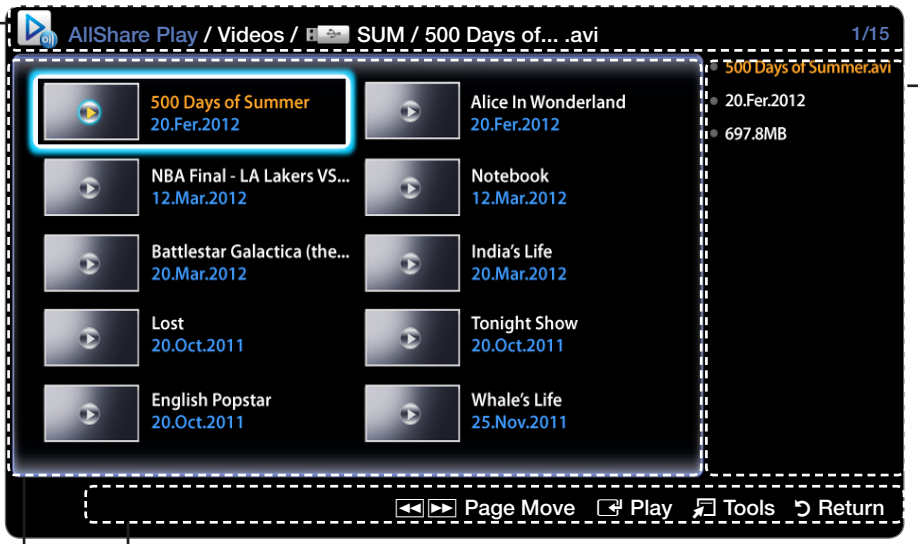
- When you use **AllShare Play** mode through a network connection, according to functions of the provided server:
  - The sorting method may vary.
  - The ◄◄ (REW), ►► (FF) or ❚❚ (Pause) buttons may not work depending on the content information.
- If you experience any file stuttering issue while playing a video over a wireless network, we recommend using a wired network.

❑ Screen Display

Move to the desired file using the ◄/►/▲/▼ buttons and then press the **ENTER** ↵ or ► (Play) button. The file is played. The screen may differ depending on the way to enter the screen.

* The displayed image may differ depending on the model.

Information:
You can ascertain the selected device name, contents mode, folder/ file name, page.



Information:
You can ascertain the name, size and created date of the selected file.

File List Section:
You can confirm the files and groups that are sorted by category.

Operation Buttons:
- ↵ Play: Plays the selected file.
- Tools: Displays the option menu.
- ↩ Return: Move to the previous step.
- ◄◄ ►► / B C Page Move: Move to up or down page.

Videos

Playing Video

1. Press the ◄/►/▲/▼ button to select the desired video in the file list.
2. Press the **ENTER** ↵ button or ► (Play) button.
   - The selected file name is displayed on the top with its playing time.
   - If video time information is unknown, play time and progress bar are not displayed.
   - During video playback, you can search using ◄ and ► button.
   - You can use (◄◄) (REW) and (►►) (FF) buttons during playback.

NOTE In this mode, you can enjoy movie clips contained on a Game, but you cannot play the Game itself.

- Supported Subtitle Formats
  - External

Name	File extension
MPEG-4 timed text	.ttxt
SAMI	.smi
SubRip	.srt
SubViewer	.sub
Micro DVD	.sub or .txt
SubStation Alpha	.ssa
Advanced SubStation Alpha	.ass
Powerdivx	.psb

  - Internal

Name	Container	Format
Xsub	AVI	Picture Format
SubStation Alpha	MKV	Text Format
Advanced SubStation Alpha	MKV	Text Format
SubRip	MKV	Text Format
MPEG-4 Timed text	MP4	Text Format

- Supported Video Formats

<table>
<tr><th>File Extension</th><th>Container</th><th>Video Codec</th><th>Resolution</th><th>Frame rate (fps)</th><th>Bit rate (Mbps)</th><th>Audio Codec</th></tr>
<tr><td rowspan="8">*.avi
*.mkv
*.asf
*.wmv
*.mp4
*.3gp
*.vro
*.mpg
*.mpeg
*.ts
*.tp
*.trp
*.mov
*.flv
*.vob
*.svi
*.divx</td><td rowspan="8">AVI
MKV
ASF
MP4
3GP
VRO
VOB
PS
TS</td><td>DivX 3.11/4.x/5.x/6.x</td><td rowspan="3">1920 x 1080</td><td rowspan="8">6~30</td><td rowspan="3">30</td><td rowspan="8">AC3
LPCM
ADPCM
(IMA, MS)
AAC
HE-AAC
WMA
DD+
MPEG
(MP3)
DTS Core
G.711
(A-Law,
μ-Law)</td></tr>
<tr><td>MPEG4 SP/ASP</td></tr>
<tr><td>H.264 BP/MP/HP</td></tr>
<tr><td>Motion JPEG</td><td>640 x 480</td><td>8</td></tr>
<tr><td>Window Media Video v9</td><td rowspan="3">1920 x 1080</td><td rowspan="4">30</td></tr>
<tr><td>MPEG2</td></tr>
<tr><td>MPEG1</td></tr>
</table>

Other Restrictions

- Video content will not play, or not play correctly, if there is an error in the content or the container.
- Sound or video may not work if the contents have a standard bit rate/frame rate above the compatible Frame/sec listed in the table above.
- If the Index Table is in error, the Seek (Jump) function is not supported.
- When playing the video through network, it may not work depending on the network status. When you play video over a network connection, the video may not be played smoothly.
- Some USB/digital camera devices may not be compatible with the player.
- The menu can be displayed late if the video is over 10Mbps(bit rate).

Video decoder	Audio decoder
• Supports up to H.264, Level 4.1 • H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported. • GMC is not supported.	• WMA 10 pro supports up to 5.1 channel. • WMA lossless audio is not supported.

Photos

Viewing a Photo (or Slide Show)

1. Press the ◄/►/▲/▼ button to select the desired photo in the file list.
2. Press the **ENTER** ↵ button.
   - During the slide show, all files in the file list will be displayed in order.
   - When you press the ► (Play) button in the file list, slide show will be started immediately.
   - During the slide show, you can adjust the slide show speed using ◄◄ (REW) or ►► (FF) button.
   - You can move to other file using ◄ or ► button.

- Music files can be automatically played during the slide show if the **Background Music On** is set.

- Supported Photo Formats

File Extension	Type	Resolution
*.jpg	JPEG	15360 X 8640
*.bmp	BMP	1920 X 1080
*.mpo	MPO	15360 X 8640

Music

Playing Music

1. Press the ◄/►/▲/▼ button to select the desired Music in the file list.
2. Press the **ENTER** ↵ button or ► (Play) button.
   – You can use ◄◄ (REW) and ►► (FF) buttons during playback.

Only displays the files with supported music file extension. Other file extensions are not displayed, even if they are saved on the same USB device.

If the sound is abnormal when playing music files, adjust the **Equaliser** in the **Sound** menu. (An over-modulated music file may cause a sound problem.)

Using the playback menu

– Press the ◄/► button to select the desired menu.

- **Play / Pause**: You can start or stop a music. Alternatively, the ► or II button on the remote.
- **Repeat Mode (Off / One Song / All)**: You can play music files repeatedly.
- **Shuffle Mode (Off / On)**: You can play the music randomly.
- **Sound Mode (Standard / Music / Movie / Clear Voice / Amplify)**

- Supported Sound Formats

File Extension	Type	Codec	Remark
*.mp3	MPEG	MPEG1 Audio Layer 3	
*.m4a *.mpa *.aac *.3ga	MPEG4	AAC	
*.flac	FLAC	FLAC	• Seek is not supported. Supports up to 2ch.
*.ogg	OGG	Vorbis	• Supports up to 2ch.
*.wma	WMA	WMA	• WMA 10 pro supports up to 5.1 channel.

❑ Media Contents - Additional Functions

Playing the selected Videos/Music/Photos files

1. Press the **TOOLS** button at each main screen and select **Play selection**.
2. Select the desired files.
   The check box appears to the left of the selected files.
3. Press the ► button to select **Play**.
   You can select or deselect all files pressing the **Select All / Deselect All**.

Setting the Encoding language in Music

Set the encoding language if the text is not supported.

1. Press the **TOOLS** button at Music main screen and select **Encoding**.
2. Select the desired encoding language.

Videos/Music/Photos Play Option menu

During playing a file, press the **TOOLS** button.

Category	Operation	Videos	Photos	Music
Go to Videos List / Go to Photos List	You can move to the file list screen.	✓	✓	
Play from the beginning	You can restart a video file from the beginning.	✓		
Title Search	You can move the other file directly.	✓		
Time Search	You can search the video using ◄ and ► button at one minute interval or entering the number directly. It may not be supported depending on the input source.	✓		
Repeat Mode	You can play movie files repeatedly.	✓		

Category	Operation	Videos	Photos	Music
Picture Size	You can adjust the picture size to your preference.	✓		
Picture Mode	You can adjust the picture setting.	✓	✓	
Sound Mode	You can adjust the sound setting.	✓	✓	
Audio Language	You can change the audio language if the video has more than one language.	✓		
Subtitle	You can set subtitles on/off.	✓		
Subtitle Settings	You can play the video with subtitles. This function only works if the subtitles are the same file name as the video.	✓		

Category	Operation	Videos	Photos	Music
Start Slide Show / Stop Slide Show	You can start or stop a slide show.		✓	
Slide Show Speed	You can select the slide show speed during the slide show.		✓	
Slide Show Effect	You can change the slide show effect during the slide show.		✓	
Background Music On / Background Music Off	You can set on/off background music when watching a slide show.		✓	
Background Music Setting	You can select background music when watching a slide show.		✓	

Category	Operation	Videos	Photos	Music
Zoom	You can zoom into images in full screen mode.		✓	
Rotate	You can rotate images in full screen mode.		✓	
Edit playlist	You can edit the playlist when playing the desired music.			✓
Play selection	Select and play multiple files.			✓
Information	You can see detailed information about the played file.	✓	✓	✓

❑ Using the DLNA Functions

You can play media contents including videos, photos and music saved on your mobile phones or the other devices (such as your PC) by controlling them on the TV via the network.

- Web storage and out of home network connectivity are not available.
- First, configure your network. For detailed procedures on using the Network Setup, refer to the “**Network Settings**” instructions.
- For more information, visit “www.samsung.com” or contact the Samsung call centre. Mobile devices may need additional software installation. For details, refer to each device’s user’s guide.
- If your Samsung TV connects to a non-Samsung DLNA server, a compatibility issue may occur during video playback.

By connecting your Samsung TV to a network via AllShare™, you can use Samsung's original functions as follows:

- Playback of various video formats (DivX, MP4, 3GPP, AVI, ASF, MKV, etc.)
- Video thumbnail feature
- Bookmark function (to resume video playback)
- Auto-chaptering (scene navigation)
- Digital content management
- Compatibility with various subtitle formats (SRT, SMI, SUB, TXT, TTXT)
- And many others

To use the original DLNA functions of Samsung fully, it is recommended that you use the AllShare™ software provided with your TV.

Playing the media contents saved on the devices

1. Connect the mobile phone or other devices which support **AllShare Play** function, and then play the media contents of each device. The popup screen appears on the bottom of your TV.
2. Select the **Allow** to accept the connected devices. The media contents of the devices can be playing on your TV.

   You can find the allowed devices on the **AllShare Settings**.

Using the **AllShare Play** function, play the media contents of the devices connected to DLNA function.

1. Press the **CONTENT** button to select **AllShare Play**.
2. Press ▲/▼ button to select desired menu (**Videos**, **Photos**, **Music**), then press the **ENTER** ↵ button.
3. When the DLNA device is selected, press the **ENTER** ↵ button again.
4. Press the ◄/►/▲/▼ button to select the desired file.
5. Press the **ENTER** ↵ button.

NOTE

- Contents may not be played on your TV depending on their resolution and format.
- The **ENTER** and ◄/► buttons may not work depending on the type of media content.
- Using the mobile device, you can control the media playing. For details, refer to each mobile's user's guide.

Using the AllShare Settings function

MENU → Network → AllShare Settings → ENTER

Shows a list of mobile phones or connected devices which have been set up with this TV for using the AllShare Settings function.

The AllShare Settings function is available in all devices which support DLNA DMC.

- Allow / Deny: Allows/Blocks the devices.
- Delete: Deletes the devices from the list.

  This function only deletes the name of the devices from the list. If the deleted device is turned on or tries to connect to the TV, it may appear on the list again.

❑ Teletext Feature

The index page of the Teletext service gives you information on how to use the service. For Teletext information to be displayed correctly, channel reception must be stable. Otherwise, information may be missing or some pages may not be displayed.

You can change Teletext pages by pressing the numeric buttons on the remote control.

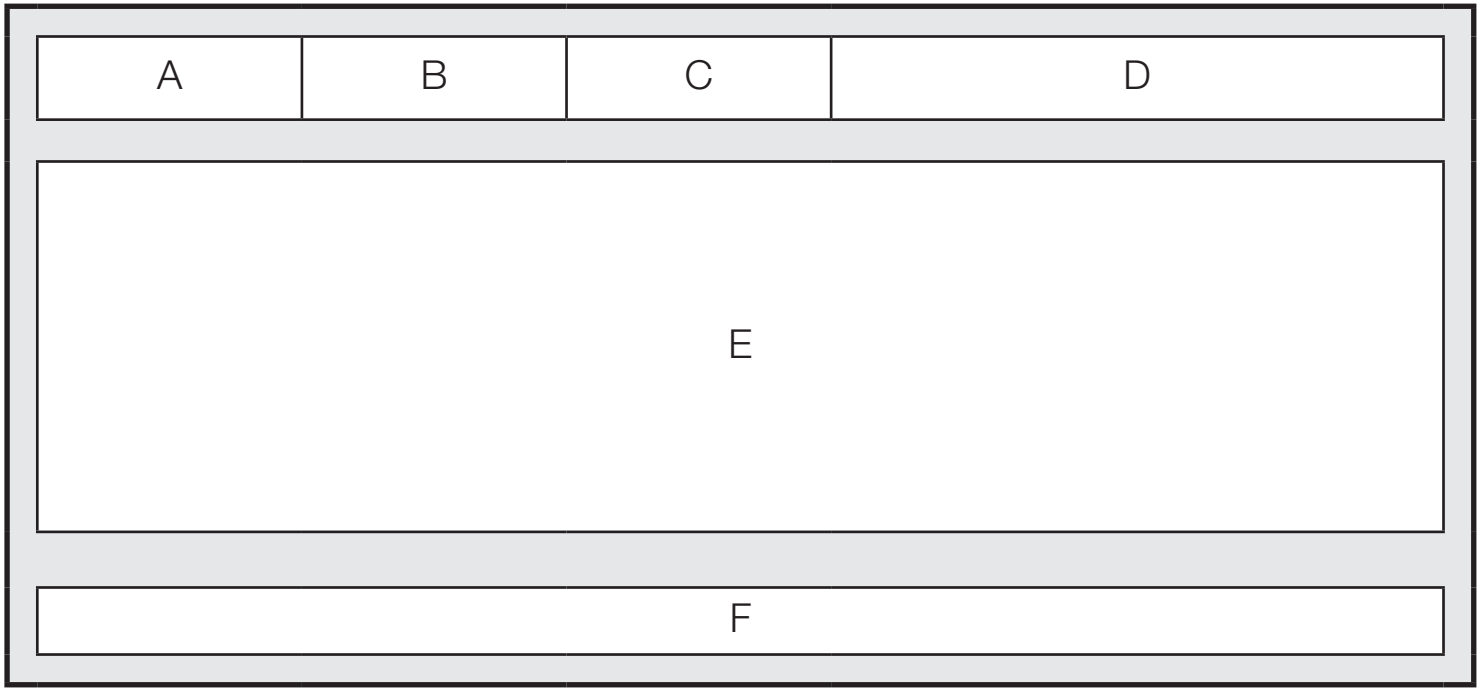
- (mode): Selects the Teletext mode (LIST/FLOF). If pressed during LIST mode, switches the mode to List save mode. In List save mode, you can save a Teletext page into a list using the (store) button.
- / (Teletext on/mix/off): Activates the Teletext mode for the current channel. Press the button twice to overlap the Teletext mode with the current broadcasting screen. Press it one more time to exit teletext.

- (sub-page): Displays the available sub-page.
- (store): Stores the Teletext pages.
- (index): Displays the index (contents) page at any time while you are viewing Teletext.
- (size): Displays the teletext on the upper half of the screen in double-size. To move the text to the lower half of the screen, press it again. For normal display, press it once again.
- (hold): Holds the display at the current page, in the case that there are several secondary pages that follow automatically. To undo, press it again.
- (page up): Displays the next Teletext page.
- (page down): Displays the previous Teletext page.

- (reveal): Displays the hidden text (answers to quiz games, for example). To display the normal screen, press it again.
- (cancel): Shrinks the Teletext display to overlap with the current broadcast.
- Colour buttons (red, green, yellow, blue): If the FASTEXT system is used by the broadcasting company, the different topics on a Teletext page are colour-coded and can be selected by pressing the coloured buttons. Press the colour corresponding to the topic of your choice. A new colour coded page is displayed. Items can be selected in the same way. To display the previous or next page, press the corresponding coloured button.

The Teletext pages are organized according to six categories:

Part	Contents
A	Selected page number.
B	Broadcasting channel identity.
C	Current page number or search indications.
D	Date and time.
E	Text.
F	Status information. FASTEXT information.



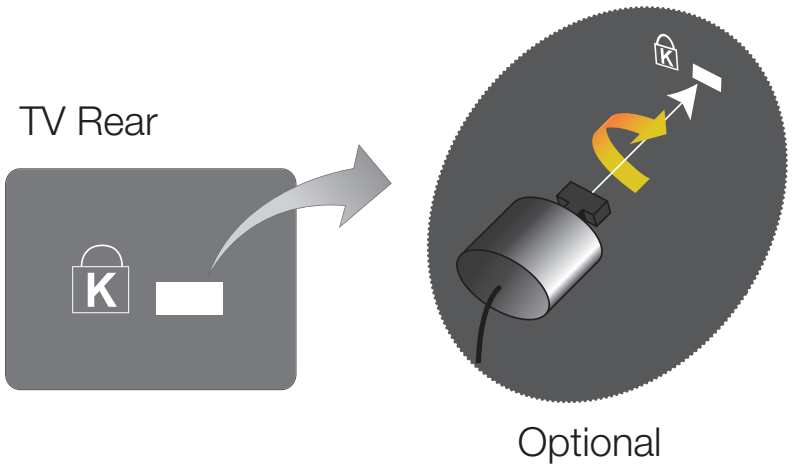
❑ Anti-theft Kensington Lock

The Kensington Lock is not supplied by Samsung. It is a device used to physically fix the system when using it in a public place. The appearance and locking method may differ from the illustration depending on the manufacturer. Refer to the manual provided with the Kensington Lock for additional information on proper use.

- Please find a "🔒" icon on the rear of the TV. A kensington slot is beside the "🔒" icon.
- The position and colour may differ depending on the model.

To lock the product, follow these steps:

1. Wrap the Kensington lock cable around a large, stationary object such as desk or chair.



Optional

2. Slide the end of the cable with the lock attached through the looped end of the Kensington lock cable.
3. Insert the locking device into the Kensington slot on the product.
4. Lock the lock.

These are general instructions. For exact instructions, see the User manual supplied with the locking device.

The locking device has to be purchased separately.

❑ Troubleshooting

If you have any questions about the TV, first refer to this list. If none of these troubleshooting tips apply, please visit “www.samsung.com”, then click on Support.

Issues	Solutions and Explanations
Picture Quality	First of all, please perform the **Picture Test** and confirm that your TV is properly displaying test image. (go to **MENU** - **Support - Self Diagnosis - Picture Test**) If the test image is properly displayed, the poor picture may caused by the source or signal.

Issues	Solutions and Explanations
The TV image does not look as good as it did in the store.	• If you have an analogue cable/set top box, upgrade to a digital set top box. Use HDMI or Component cables to deliver HD (high definition) picture quality. • Cable/Satellite subscribers: Try HD stations from the channel line up. • Aerial connection: Try HD stations after performing Auto tuning. • Many HD channels are up scaled from SD (Standard Definition) contents. • Adjust the Cable/Set top box video output resolution to 1080i or 720p. • Make sure you are watching the TV at the minimum recommended distance based on the size and definition of the signal.

Issues	Solutions and Explanations
The picture is distorted: macroblock error, small block, dots, pixelization	• Compression of video contents may cause picture distortion especially in fast moving pictures such as sports and action movies. • Low signal level or bad quality can cause picture distortion. This is not a TV issue. • Mobile phones used close to the TV (cca up to 1m) may cause noise in picture on analogue and digital TV.
Colour is wrong or missing.	• If you're using a component connection, make sure the component cables are connected to the correct jacks. Incorrect or loose connections may cause colour problems or a blank screen.

Issues	Solutions and Explanations
There is poor colour or brightness.	• Adjust the **Picture** options in the TV menu. (go to **Picture Mode / Colour / Brightness / Sharpness**) • Adjust **Energy Saving** option in the TV menu. (go to **MENU** - **System - Eco Solution - Energy Saving**) • Try resetting the picture to view the default picture settings. (go to **MENU** - **Picture - Reset Picture**)
There is a dotted line on the edge of the screen.	• If the picture size is set to **Screen Fit**, change it to **16:9**. • Change cable/satellite box resolution.
The picture is black and white.	• If you are using an AV composite input, connect the video cable (yellow) to the Green jack of component input 1 on the TV.

Issues	Solutions and Explanations
When changing channels, the picture freezes or is distorted or delayed.	• If connected with a cable box, please try to reset the cable box. Reconnect the AC cord and wait until the cable box reboots. It may take up to 20 minutes. • Set the output resolution of the cable box to 1080i or 720p.
Sound Quality	First of all, please perform the **Sound Test** to confirm that your TV audio is properly operating. (go to **MENU** - **Support - Self Diagnosis - Sound Test**) If the audio is OK, the sound problem may caused by the source or signal.
There is no sound or the sound is too low at maximum volume.	• Please check the volume of the device (Cable/Sat Box, DVD, Blu-ray etc) connected to your TV.

Issues	Solutions and Explanations
The picture is good but there is no sound.	• If you are using an external device, make sure the audio cables are connected to the correct audio input jacks on the TV. • If you are using an external device, check the device's audio output option (ex. you may need to change your cable box's audio option to HDMI when you have a HDMI connected to your TV). • If you are using a DVI to HDMI cable, a separate audio cable is required. • Reboot the connected device by reconnecting the device's power cable. • If your TV has a headphone jack, make sure there is nothing plugged into it.

Issues	Solutions and Explanations
The speakers are making an inappropriate noise.	• Check the cable connections. Make sure a video cable is not connected to an audio input. • For aerial or cable connections, check the signal strength. Low signal level may cause sound distortion.
No Picture, No Video	
The TV will not turn on.	• Make sure the AC power cord is securely plugged in to the wall outlet and the TV. • Make sure the wall outlet is working. • Try pressing the **POWER** button on the TV to make sure the problem is not the remote. If the TV turns on, refer to “The remote control does not work” below.

Issues	Solutions and Explanations
The TV turns off automatically.	• Ensure the **Sleep Timer** is set to **Off** in the **Time** menu. • If your PC is connected to the TV, check your PC power settings. • Make sure the AC power cord is plugged in securely to the wall outlet and the TV. • When watching TV from an aerial or cable connection, the TV will turn off after 10 ~ 15 minutes if there is no signal.

Issues	Solutions and Explanations
There is no picture/ video.	• Check cable connections (remove and reconnect all cables connected to the TV and external devices). • Set your external device's (Cable/Set top Box, DVD, Blu-ray etc) video outputs to match the connections to the TV input. For example, if an external device's output is HDMI, it should be connected to an HDMI input on the TV. • Make sure your connected devices are powered on. • Be sure to select the TV's correct source by pressing the **SOURCE** button on the remote control. • Reboot the connected device by reconnecting the device's power cable.

Issues	Solutions and Explanations
Aerial(Air/Cable) Connection	
The TV is not receiving all channels.	• Make sure the Aerial cable is connected securely. • Please try **Setup** (Initial setup) to add available channels to the channel list. Go to **MENU** - **System - Setup** (Initial setup) and wait for all available channels to be stored. • Verify the Aerial is positioned correctly.
The picture is distorted: macro block error small block, dots, pixelization	• Compression of video contents may cause picture distortion, especially on fast moving pictures such as sports and action movies. • A low signal can cause picture distortion. This is not a TV issue.

Issues	Solutions and Explanations
Network Connection	
The wireless network connection failed.	• Samsung Wireless USB dongle is required to use a wireless network. • Make sure the Network Connection is set to **Wireless**. • Make sure the TV is connected to a wireless IP sharer (Router).
Software Upgrade over the network fails.	• Try **Network Settings** in **Network** menu. • If you have latest SW version, SW upgrade will not proceed.
Others	
The picture will not display in full screen.	• HD channels will have black bars on either side of the screen when displaying up scaled SD (4:3) contents. • Black bars on the top and bottom will appear during movies that have aspect ratios different from your TV. • Adjust the picture size options on your external device or TV to full screen.

Issues	Solutions and Explanations
The remote control does not work.	• Replace the remote control batteries with the poles (+/–) in the right direction. • Clean the sensor's transmission window on the remote. • Try pointing the remote directly at the TV from 5~6 feet away.
The cable/set top box remote control doesn't turn the TV on or off, or adjust the volume.	• Programme the Cable/Set top box remote control to operate the TV. Refer to the Cable/Set user manual for the SAMSUNG TV code.
A "**Mode Not Supported**" message appears.	• Check the supported resolution of the TV, and adjust the external device's output resolution accordingly.

Issues	Solutions and Explanations
There is a plastic smell from the TV.	• This smell is normal and will dissipate over time.
The TV **Signal Information** is unavailable in the **Self Diagnosis** Test menu.	• This function is only available with digital channels from an Aerial / RF / Coax connection.
TV is tilted to the right or left side.	• Remove the stand base from the TV and reassemble it.
There are difficulties assembling the stand base.	• Make sure the TV is placed on a flat surface. If you can not remove the screws from the TV, please use a magnetized screw driver.

Issues	Solutions and Explanations
The **Channel** menu is grey out (unavailable).	• The **Channel** menu is only available when the TV source is selected.
Your settings are lost after 30 minutes or every time the TV is turned off.	• If the TV is in the **Store Demo** mode, it will reset audio and picture settings every 30 minutes. Change the settings from **Store Demo** mode to **Home Use** mode in the **Setup** (Initial setup) procedure. Press the **SOURCE** button to select **TV** mode, and go to **MENU** → **System** → **Setup** (Initial setup) → **ENTER**↵.
You have intermittent loss of audio or video.	• Check the cable connections and reconnect them. • Loss of audio or video can be caused by using overly rigid or thick cables. Make sure the cables are flexible enough for long term use. If mounting the TV to the wall, we recommend using cables with 90 degree connectors.

Issues	Solutions and Explanations
You see small particles when you look closely at the edge of the frame of the TV.	• This is part of the product's design and is not a defect.
You turned the TV off 45 minutes ago, and it turned on again.	• It is normal. The TV operates the OTA (Over The Aerial) function itself to upgrade firmware downloaded whilst your watching TV.
There are recurrent picture/sound issues.	• Check and change the signal/source.
A reaction may occur between the rubber cushion pads on the base stand and the top finish of some furniture.	• To prevent this, use felt pads on any surface of the TV that comes in direct contact with furniture.
The message "**This file may not be playable properly.**" appears.	• This may appear because of high bit rate of content. Content generally will play but could experience some playability issue.

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